

FROM CONCEPT, TO OBJECT AND BACK AGAIN.

GABRIELA RIBEIRO

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My thesis is a personal account of the ideas behind my work and the evolution of my ideas into being. It describes not only these concepts but also the aesthetic and technical considerations of the work itself. Outlining the journey from concept, to the design and its evolution on paper where every aspect is considered then, into the physical fabrication where every aspect is controlled through technical hurdles and on to presentation before an audience.

A. Aims and Inspirations.

I see the effect of my pieces as brightening and enriching any situation in which they might occur. With the added surprise of seemingly incongruous yet strangely harmonious colour combinations.

I wish to create worlds within worlds through the use and exploration of colour, pattern and texture combinations.

With this as my concept and the 'real' impetus behind my desire to create, I sought to tie up or unify this within a pictorial theme, one which connected the work as a "series" without heavily complicated intellectual implications.

I have come to the conclusion that all forms are subjective. Even if one should choose a simple circle, upon which to practice one's art of colour, it can always be linked to something vastly remote, such as the wheel. For example, a pure conical shape, conceived by the artist for the sake of the shape and nothing more, is perceived by a brash intruder as "Oh, a clown's hat!" Even a simple triangle opens the door to a world of subjective interpretations. It is largely for this reason that I have chosen for my pieces to state clearly where my interest lies, thus avoiding misdirected observations - in relation to the form.

From here I move into varying degrees of abstraction.

The "Fontana Dictionary of Modern Thought" defines Abstract Art as ; 'Paintings and sculpture making no reference to the visual world.' (1)

Under this definition, my work may not be seen as abstract, because it is not painting nor is it within the criteria of sculpture (i.e. three dimensional).

However choosing to acknowledge only the second half of this definition, i.e. 'making no reference to the visual world', I therefore, see my work as an "abstracted description of a reality", though to a lesser degree than that defined above. My marks and textures, patterns and forms do make reference to elements of the visual world but when removed from their context, the link may be blurred. I use abstraction to simplify. To extract that which is essentially of interest within the subject, to put it forward as the most important. I find my role is that of focusing and enlarging the image.

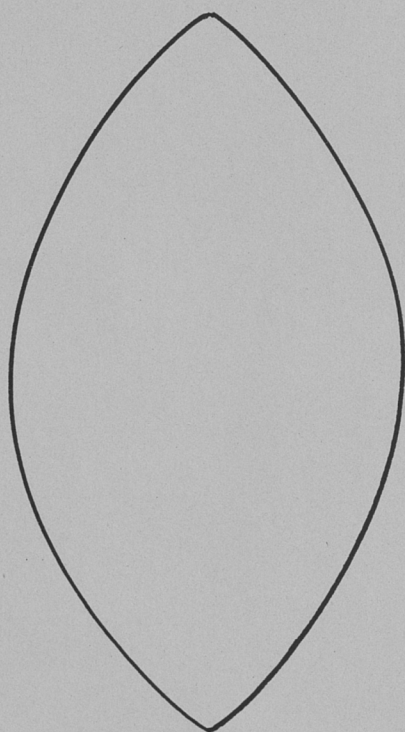
A. Aims and Inspirations.

1. BROOCHES.

My brooches are based on an ovoid form with pointed ends(overleaf).My interest in this form began with the recognition of its strength as a form and then as a symbol,being read either as a female icon,a shield or a mask.For me the form itself embodied all three meanings,however for each of my pieces one or other of these symbols is dominant.

As a form it can be perfectly balanced with equal sides,or distorted through infinite abstraction possibilities,yet maintaining much,if not all,of its initial balance.Throughout the entire series I varied and made unique each form,distorting,adding or subtracting as I felt was appropriate,granting each "his/her" own character or personality.By limiting myself to the exploration of one form,I was able to derive a complete series with slight variations.

Physically I find it a great pleasure to grind and form such a curve - as in these ovoid forms,searching for the 'perfect' line,a tactile and even line.The perimeter being as important as the pattern or surface texture and the piece as a whole,for it is here in the outline of the form that the first connection with symbolism occurs and is either distorted or enhanced through the colour and pattern.



A. Aims and Inspirations.

2. WALL RELIEFS.

The second half of this year has been devoted to producing one major piece, a low relief wall piece which is to be made up of many components. Each piece within this grouping fits harmoniously among the others, yet when viewed alone, should be valid and strong in itself.

My inspiration to create a large work of many components came from something I read regarding pattern:

'.....unlike a painting, which always presupposes the existence of a limit formed by the edge of the frame and in which the pictorial message is a set unit, the decorative surface assumes its limits to be infinite and contains in the smallest of its parts the total information carried by the system as a whole, since each part contains the single symbol that will be repeated over the whole area covered by the decoration.'(2)

This is not to say that I see my work as repetitious pattern, but that I was inspired by the notion of a limitless plane and again by the notion of scattered elements connecting through negative and positive space. I see this limitless plane as a surface upon which to freely (i.e. free of preconceived and subjective reactions to form) practice my Art of colouration.



B. Physical considerations.

'Jewelery is not jewelery until it is worn.' - Susan Cohn(3)

1. THE FUNCTION OF WEARING.

The brooches originally began with the intention of producing highly finished maquettes of the larger wall work which were somehow suitable for use as brooches. Before long I realised that each scale represented entirely differing concerns, I understood that it was unrealistic to assume a mere expansion from small scale to large would suffice as a strong design, so I chose to pursue each as separate yet complementary directions.

The notion of wearable glass inspired me.

I saw it as an opportunity to decorate and colour peoples dress with a striking and vibrant accessory, embodying no less Artistic consideration than any designed artwork. I see each as an Artpiece first, followed by its function of Jewelery.

Into each design had to enter two essential considerations, those of weight and fixture. Having struggled with various complicated means of fixing the brooch to clothing I came up with the most simple, strong and appropriate for my needs. It consists of a hole being incorporated in the design of each piece and a pin which is worn externally (as shown overleaf). This method of fixture has two advantages, firstly it allows the glass piece to remain uncluttered of complicated fixtures and therefore can be virtually any thickness. Secondly, it incorporates the fabric of the clothing, making the brooch appear to join with its surroundings, thus using this essential requirement as a point of interest.



'Urban Armour'

B. Physical considerations.

2. DIMENSIONALITY.

I see the expansion from texture to form as when depth comes into play. Texture follows the profile, form *is* the profile.

Incorporating both, texture and low relief, my work reaches out into the third dimension and, making use of its planes, it explores the opportunity of surface treatment, which is yet another artistic device at our disposal.

To create worlds within worlds is my aim.

My work deliberately moves away from the traditional smooth surface of glass and plunges headfirst into the unlimited world of textures. Found textures from a variety of ordinary objects are manipulated and juxtaposed. I raise the surface of the glass or cut deep into it, disrupting the widely recognised pure and sleek finish of glass.

Texture has been described by Kranz and Fisher as
'.....the first real intrusions of space into the interface which separates the worlds of two and three dimensions.' (4)

As to the thought of Two or three dimensions, my thoughts were expressed perfectly when Frank Stella explained.....

'.....And somewhere in-between isn't a bad analogy for my work. I work away from the flat surface but I still don't want to be three-dimensional; that is, totally literal.....more than two dimensions but short of three so, for me, 2.7 is probably a very good place to be.' (5)

B. Physical considerations.

3. COLOUR. - (i) A personal approach.

Within the world of infinite combinations of colour and pattern of form and texture lies the responsibility of using such tools and remaining true to the concept, without becoming lost amongst so many possibilities.

My wish is to always explore freely the use of colour, pattern and form, in direct accordance with the concept.

My use of colour and pattern comes from the shape, it lies dormant beneath the white of the page awaiting discovery. The shape is freely conceived with the wish of capturing a gesture. Following this, I pattern the shape in accordance with the character of the piece, from this point colour finds its way into the design.

My application or use of colour is instinctive, this "instinct" is loosely based on what I have learned over the past years at Art School and largely based on personal taste, or personal conception of balance and proportion. It has been said that as artists we should 'learn what needs to be learned and then go one's own way.' (6). It is in fact a natural progression, for one will always learn what one is ready to learn and practice within his/her capacity, being governed by their knowledge and instincts. However,

'We can ultimately strengthen our subjective opinions and work with greater understanding of the creative potential in our materials.' (7). Johannes Itten once said

' "If you, unknowing are able to create masterpieces in colour then unknowledge is your way. But if you are unable to create masterpieces in colour out of your unknowledge, then you ought to look for knowledge." ' (8)

I find the step of colouration the most difficult, exhausting and taxing, yet the most satisfying when I actually hit upon that for which I had been searching. It is the correct expression, that which compliments the form and answers my aspirations of the concept. It exhausts because it draws upon all creative energies, the success of the piece relies upon all creative energies being unified and active at this critical point.

In applying colour I follow the same process as in patterning the form; I repeat each design again and again, with subtle changes each time until I find *the* one, that which adds up on all sides. It's that which *feels* right, that which is peculiar and balanced. In this sense a purely subjective reaction to colour.

B. Physical considerations.

3. COLOUR. - (ii) A discussion of selected pieces.

To illustrate my perception of colour I refer to my work, for this exercise I have chosen to discuss individual pieces, each vastly different, yet each a good example of colour's potential as an emotionally expressive vehicle.

This must not be seen as an accompaniment to the work, but as a philosophical exercise.

"Mon Coeur" -

Red, the colour of blood and passion. Symbolic of a red beating heart restrained and bound, squeezed out of shape. This piece is about being trapped or emotionally bound as reflected in the "wrapped" texture and again in the form being tied by the black and white wrapping.

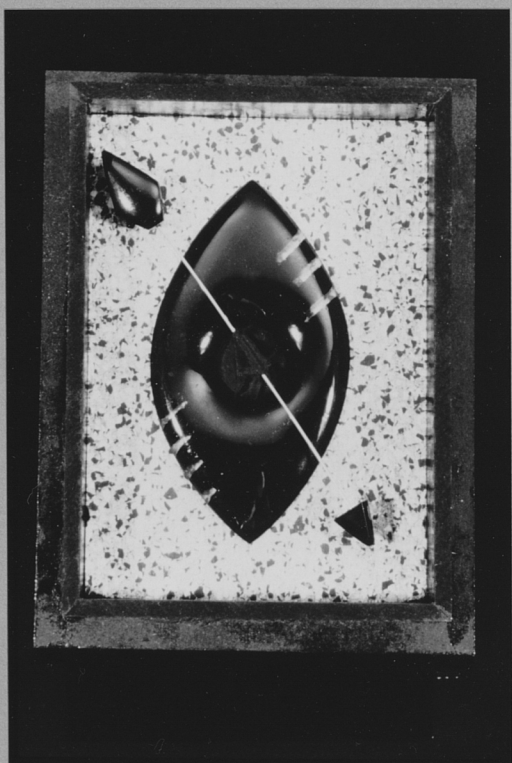
"Jester" -

Lime green and lilac are colours which I have always associated with the Jester; being odd tones of secondary colours and creating an unusual combination. The black half diamond pattern is reminiscent of their stockings. The kick of the front leg whilst poised upon the toes of the back is, to me, a frozen moment of the performance of courtly antics and exaggerated gestures.

"Amigo". -

In this piece I have utilised two colourless glasses as black is defined as 'colourless', and attempted to create a pure strong and dominant form, of hard, yet seductive presence. For me, it conveys the message of strength and independence, of completeness within the circle yet individuality for not having followed the circle in the outer perimeter, I see this individuality as further complimented by the number of clear inserts on either side being irregular - an unexpected element. I have utilised simple elements which, to me, symbolise everything.

I intended this piece as its title so suggests, to be as a friend, nice to hold or have in one's company, to touch and admire, to confide in, and seek wisdom from. For me, this piece is totally symbolic of three things, being individual, complete and self contained in purity and simplicity, these elements characterise my spiritual aspirations.



'Amigo'

Observations.

One pleasure of the working process is,experiencing at first hand how others relate to my work 'in progress'.Observing (invited) visitors as they handle my brooches,I delight in the way in which they feel the surface,or position it on their clothing.Some pieces are destined to be polished on the persons cuff or trouser leg,others simply felt,travelled upon by the finger tips.Then they come to peg it to their body,on its side ,or ,what is to me,"so obviously" upside down !

Through this, I have learned that we all see things totally differently. That a new and totally original artpiece which bears little or no direct resemblance to the present world,except for its function (that of brooch),is open to an unlimited number of subjective interpretations.

However ,I like to think that,with one or two words,the interpretation becomes less subjective, as the piece is observed within the context of its title.

Prior to a piece being shown in a gallery where in it sits neatly behind its written label,I,as an Artist,often enjoy the totally honest response between piece and human without the stepping stone of a title.Why then,you may ask,do I feel the need to title my pieces ?
- Because,by the same token that I enjoy a fresh uninformed opinion I also like to begin by taking the first step for the viewer,by leading them through the door into the piece.Beyond this,the world of appreciation or criticism awaits their creation.

I know that the essential elements of such a setting are,the piece (which is,in one way or another, symbolic of the Artist's understanding of the world),the viewer,and his/ her background or,his/ her understanding of the world which dictates to a great extent their reading of the work,thus making the reading of abstract Art,yet again,*ESSENTIALLY SUBJECTIVE*.

I am not there as a part of this setting,nor do I want to be there, in person or in writing to explain the piece.I consider an Artpiece a dire failure if it becomes a case of, "Well you'll have to read about it to grasp its real meaning."

.Frank Stella put it simply in saying,

'My painting is based on the fact that only what can be seen there is there.'(9).This statement reflects my opinion absolutely. 8.

Manufacture process. - Brooches and wall reliefs.

1. Design process- Drawing in 'actual' scale I explore the shape, pushing the perimeter, extracting any possible variations. Then having selected *the* shape, using tracing paper I divide the shape many times in combinations of segments. Having selected the most satisfactory, I, again with tracing paper proceed with pattern variations upon the segmented shape until I narrow it down to one. At this point colour comes into play, I, again try variations, simultaneously texture and form creep into the design.

Throughout the process of designing the brooch, the idea of the pin is everpresent in my mind and slowly taking form in line with the elements of the brooch, that they may be ultimately complimentary and not read as an afterthought.

Designing for the wall piece has been much the same, however due to its size I find it more efficient to make smaller preliminary sketches and then blow up each "possibility" i.e. those which look good in sketch form are blown up and get a second viewing in actual scale.

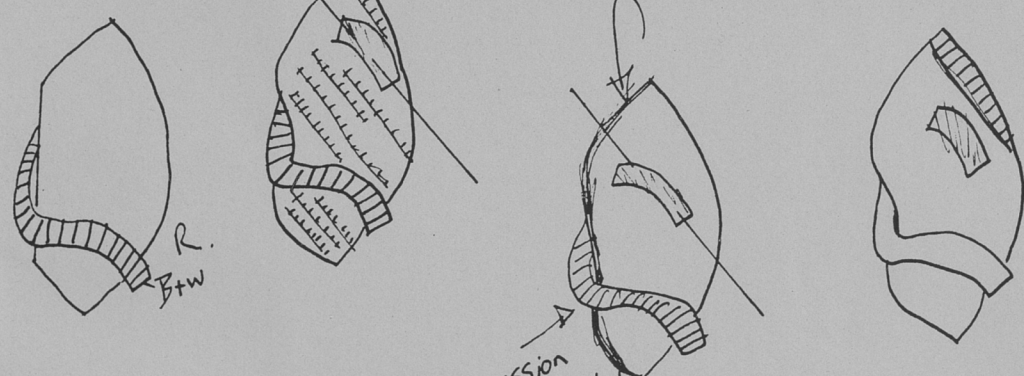
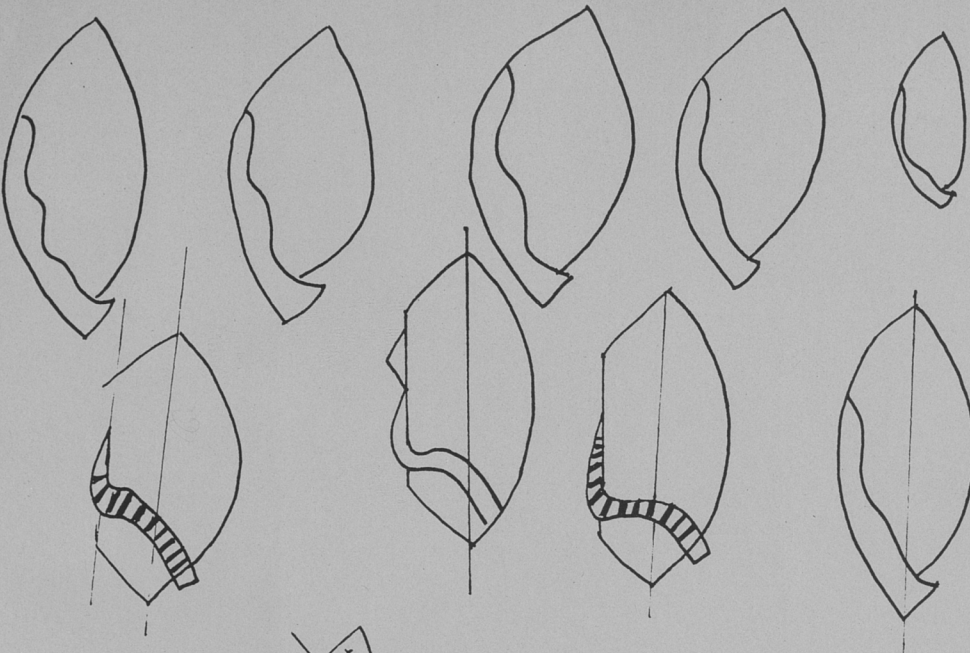
In considering wall reliefs in glass, the means of fixture to the wall was everpresent in my mind, having tested a great variety I have come up with a most appropriate means, which I will describe later.

All aspects of design are considered and resolved before commencing practical work.

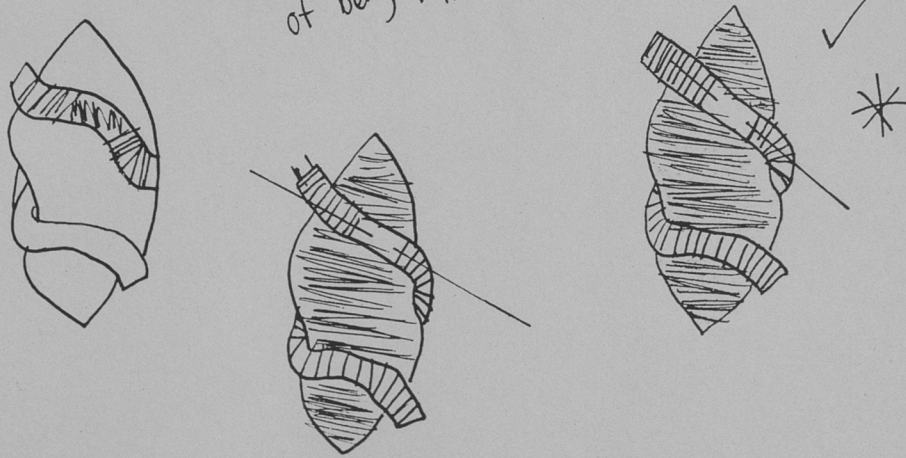
2. Model making

(a) For this stage of the process I have chosen to use clay. I prefer to use new clay - but "pug-milled" clay is an adequate and cheaper alternative (when the facility is available), especially on larger scale work. If the clay is damp and sticky it is prepared by rolling it on a slab of plaster which absorbs excess moisture and allows the clay to dry to a workable consistency.

(b) The clay is then formed to the required shape and relevant texture and pattern incorporated at this stage. The position of decorative elements whether in intaglio or relief pattern must be resolved in the model in order to ensure the correct structure in the final glass piece.



impression
of being pulled in.





'Mon Coeur'

(c) I make a plaster negative from the clay model. The clay is then removed from the plaster mold which can then be used as a permanent form from which to make a rubber or wax positive. Prior to forming the positive model, I carve the mold in order to create the final delicate relief.

(d) Using Gelflex rubber which I melt in a microwave on high for 2-3 minutes and then pour into the mold, I form a model for the manufacture of many refractory molds to contain the glass. However for larger work I have chosen to form the model in wax. For this, I melt the wax in a saucepan over a hotplate, allow it to cool a little, then pour it into the mold which has been pre-soaked in water, this soaking enables the wax to release easily from the mold once it has set hard.

The advantages of using Gelflex are, having a permanent model which requires no release agent to separate it from the plaster and thus results in a totally pure and clean mold. However its only drawbacks are that it is very expensive, therefore I only use it on smaller pieces. Although it is reusable it becomes rather porous after remelting two or three times, rendering the surface uneven.

3. Making the mold. From the wax or rubber model I make a refractory mold which is durable for use in the kiln i.e. able to withstand the heat at fusing temperature without breaking, slight cracks are acceptable however a large break could be disastrous.

The recipe I use consists of Plaster/Silica/Talc, approximately one third of each. I mix the dry ingredients first, then slowly add them to the water at a ratio of 2:1, powder to liquid, when the mixture is saturated I paint the first layer on to the model, this method ensures that all detail is captured without air bubbles on the surface. When this layer is almost set I pat on the remainder of the mixture, three to four centimetres thick.

When the mold is set I turn it over and pull the rubber out gently, or steam out the wax, using the steam from a hose connected to a pressure cooker.



4. Glass Crushing. Since I am working with "Bullseye" compatible glass which comes in sheets from America, in order for me to work with it ,it firstly needs to be crushed.After having experimented with various means of crushing including a Ball mill,Grog crusher,and fritting (heating the glass then suddenly removing it from the heat and plunging it into water to shatter it via thermal shock) and having found unacceptable problems with each ,I have resorted to the most simple yet the most labour intensive,that being,crushing by hand i.e.without the use of any machinery.

Mine is an updated version of the workshop honoured technique of wrapping the glass in newspaper and banging away at the packets with a hammer until guessing that the desired grain is finally achieved.I have simply constructed a 40cm tall X 25cm diameter cardboard cyclinder which I place over ten sheets of newspaper on the cement floor and wearing a respirator,ear muffs and a full face mask, I drop a heavy weight namely a metal plunger on to each piece of glass.The advantage of this method is being able to see the larger pieces and break them down immediately.The loss due to chips flying above the 40cm wall is minimal.Any newspaper impurities will burn out during the firing leaving no trace.

I discard the finest powder as it carries the most contamination and,due to the size of each particle the colours are weakened or whitened and appear faded.Each powder particle of crushed glass is surrounded by air which cannot successfully escape through more than one centimetre of thickness during the firing, resulting in an extremely porous and fragile material.

Apart from crushing the "Bullseye" I may heat it and pull canes i.e. glass rods, where they are required in the design.

5. Packing the mold. When making brooches I work with canes, pre-fired dots and very fine grades of glass,e.g. those which pass through a wire kitchen sieve yet discarding that which passes through a one hundred grade sieve,such grades allow me to mix a paste with water and paint extremely fine details into each piece.The canes and dots are glued down to prevent them from moving prior to fusing,I use P.V.A. glue which burns out during the firing leaving no trace of glue residue.





With regard to the large scale work the packing process is much the same, however I also work with larger grades of crushed glass and large pieces when necessary. As these larger molds require pre-firing, I fire them empty and then when the kiln has returned to room temperature I pack them in the kiln to avoid moving the dry and fragile molds.

6. Firing schedule. Due to the small scale of the work and the fact that I work with open faced molds, I am able to begin with a fuse-firing, without having to pre-fire the molds. Each mold is packed with glass then dried in the drying cabinet for approximately one day, or until bone dry, i.e. when all the physical water has evaporated. Some molds are only partially packed according to my requirements of the design, and fused in two firings. Others are fused completely in one firing.

The larger molds require pre-firing. Depending on size, I take the empty mold up at

100 an hour to 600 (with all kiln vents open)

Here I hold it on 600 until all moisture has evaporated, this is checked by holding a piece of glass to a vent to see moisture build up on the glass surface.

My fusing schedule for brooch forms basically as follows, with slight variations when working with softer colours such as black.

Full speed to 600 degrees (with vents open)

soak for half an hour at 600 degrees (with vents open)

Check for moisture escaping from vents, continue to soak or proceed with vents now closed.

Full to 840 degrees

Soak for half an hour at 840 degrees

Crack (open the kiln door slightly) to 600

Anneal or soak at 500 for one hour.

The firing schedule for larger work differs in that I would take it up

150/hr. to 450

full to 800

soak on 800 20 mins at "pre-fuse temperature" to ensure that everything is at the same temperature prior to entering the fusing range.

(See Richard Whitely, Thesis 1987.)

full power to 840,hold for half an hour or more
flash it quickly to 870 to remove the last of the bubbles
or on to 960 to break up devitrification and persistent bubbles.
crack to 600
anneal at 500,the soak time varies with the thickness of each piece.

7. Finishing processes. After the fusing I remove each piece from its mold,by breaking the mold away.Thus each refractory mold is a 'one - off',for this reason I rely largely upon the use of Gelflex rubber or wax models as my positive,from which I can continually reproduce refractory molds.

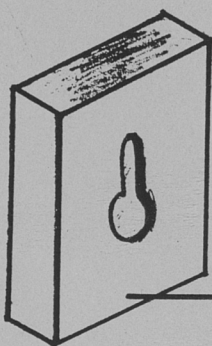
Having removed the mold and washed my glass I then grind it to the required thickness and shape.The piece is then slightly sandblasted and goes back into the kiln,on a sheet of FibreFrax ceramic paper to be fire polished,that is,if the required finish is that of polish as opposed to a sandblasted matt surface or a translucent acid etched finish.Due to the fact that my pieces are textured and not smooth,fire polishing is the quickest and simplest means of polishing the entire front surface.

The method of hanging which I have found suitable for all of my wall pieces involves the gluing (silicone) of three sections of rectangular aluminium, steel or brass tubing to the back of each piece,as shown overleaf.Two from which to hang and a third on the lower half to ensure that it hangs parallel to the wall and not on an angle.

My schedule for fire polishing is as follows.

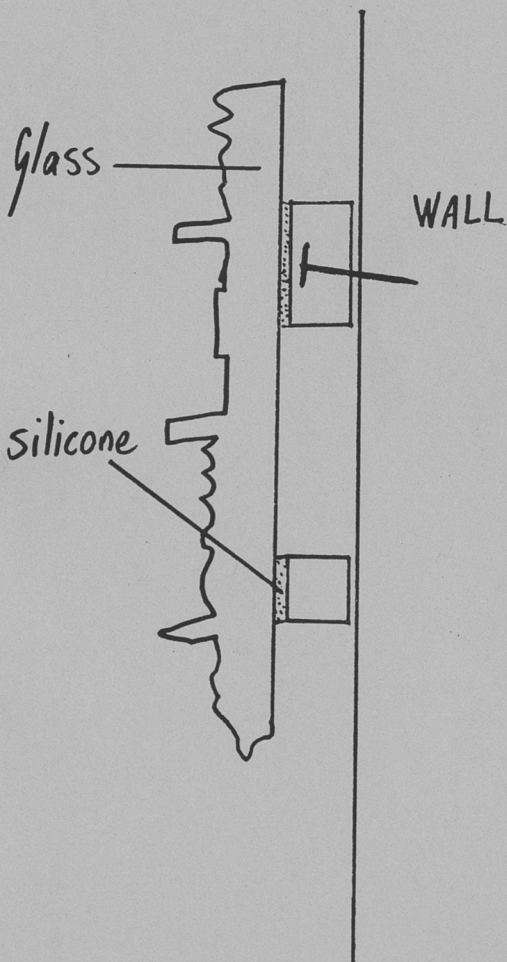
Full to 740 degrees(slower for thicker/larger pieces)
Hold for 2 minutes and observe for effect
Crack to 600
Anneal at 500 for 1 hour.(longer for thicker than 1.5 cm)

N.B. all temperatures are in degrees Celcius.



Key hole hook

Rectangular metal
tube



8. Presentation ? A difficult question to answer, yet this must accompany all other primary considerations from the very beginning in the concept and design.

when considering the wall pieces, the means of hanging them progressed along with the developing designs.

For the presentation of my brooches I chose to package them, in an effort to marry presentation with practicality.

For each brooch I have made a wooden box of appropriate proportions, in each I have placed a linoleum or rubber mat upon which the brooch sits. Each mat was selected in consideration of the design elements of each brooch, to compliment the colours and forms. I then painted the boxes, using elements of each brooch pattern, to achieve a total work or *gesamtkunstwerk*.

I see the boxes as being compact and protective, facilitating display, transportation and storage of the brooches, that is, when they are not, in use.

Conclusion.

The emphasis on design and strict planning on paper have given me a guide in my work as a whole, it facilitated spontaneity and experimentation within each composition. Whilst introducing a sense of order through which I slowly began to discover the style I am developing as mine. For, I realize that, as Kenneth Bates says, 'making one design is inevitably the result of choosing from many variations of that design.' (10). - these results are my selection.

In the same way that a blank canvas is transformed into a painting from the hand of the painter, I control the evolution of my concept into two dimensional design and through into the third dimension from which, ideally, the concept reaches the viewer.

Through my experience I have seen that when an idea is focused and the work is dominated by this single intention from the first pencil mark to the last nail going into the wall, the possibility of the viewer being able to perceive the Artist's intention is at its highest. If every movement, every action is dominated by this single intention then the work has no choice but to "scream" of its origins.

BIBLIOGRAPHY

Bates, Kenneth, F. "Basic Design - principles & practice"
The world publishing company, New York, 1960.

Blakemore, Francis. "Japanese Design - Through textile patterns."
Weatherhill Inc., New York, 1979.

Branzi, A. "The Hot House - Italian New Wave Design"
Thames and Hudson, Great Britain, 1984.

Ed. Bullock, Allan, "The Fontana Dictionary of Modern Thought"
Fontana Press, London, 1988.

Itten, J. "Design and Form."
Thames and Hudson, London, 1978.

Justema, William "The pleasures of pattern"
Van Nostrand Reinhold Company, New York, 1976.

Kranz, S. & Fisher, R. "Understanding Visual Forms"
Van Nostrand Company, New York, 1976.

Rubin, W. "Frank Stella 1970-1987"
The Museum of Modern Art, New York, 1987.

de Saumarez, Maurice "Basic Design - The dynamics of visual form"
The Herbert Press, London, 1983.

Whiteley, R. "Thesis" 1987, Canberra Institute of the Arts.

Ed. Wilkes, G.A. "Collins English Dictionary"
Collins publishers Pty. Ltd., Sydney, 1979.

JOURNALS

Ed. and Publisher, Esterow, Milton "Artnews"
Lawrence Wescheler "Stella's Flying Ships"
September 1987. Volume 86, Number 7, New York.

FOOTNOTES.

1. Ed. Bullock, Allan "the Fontana Dictionary of Modern Thought"
Fontana Press, London, 1988. page 4
2. Branzi, A. "The hot house - Italian New Wave Design"
Thames and Hudson, Great Britain, 1984. page 117.
3. Susan Cohn, Artforum public lecture,
Canberra Institute of the Arts, 4/6/89.
4. Kranz, S. & Fisher, R. "Understanding Visual Forms."
Van Nostrand Company, New York, 1976. page 33
5. Rubin, W. "Frank Stella 1970 - 1987"
The Museum of Modern Art, New York, 1987. page 77
6. Bea Maddock, Artforum public lecture,
Canberra Institute of the Arts, 22/3/89.
7. Justema, William "The pleasures of Pattern"
Van Nostrand Reinhold Company, New York 1976. page 95
8. Itten, J. "Design and Form"
Thames and Hudson, London, 1978. page 11
9. Ed. and Publisher, Esterow, Milton "Artnews"
Lawrence Weschler "Stella's Flying Ships"
September 1987. Volume 86, Number 7, New York. page 93.
10. Bates, Kenneth, F. "Basic Design - principles and practice"
The World publishing company, New York, 1960. page 167.